

# Work Order ID 65132

Thursday, January 06, 2011 2:27:13 PM



Page 1

Item ID: D2873-045

Accept



Setup Start



Revision ID:

Stop



Item Name: Nut Plate Assembly

Start Date: 1/6/2011 Start Qty: 20.00



Cust Item ID:

Required Date: 1/20/2011 Req'd Qty: 20.00



Customer:

Reference:

Approvals:

Process Plan:

*[Signature]*

Date: 1/10/11

Tooling:

Date:

Run Start



QC:

Date:

SPC (Y/N):

Date:

Stop



Sequence ID/  
Work Center ID

Operation  
Description

Set Up/  
Run Hours

Tool ID

Tool #

Plan  
Code

Accept  
Qty

Reject  
Qty

Reject  
Number

Insp.  
Stamp

Draw Nbr

Revision Nbr

D2873

Rev A

100

0.00



BAND SAW

Bandsaw

Memo

0.00

Jeaspa Bandsaw

Cut blanks: 1.000" x 0.375" x 2.700" long

*SL 11/01/18*

*(20)*

110

0.00



HAAS CNC VERTICAL MACHINING #1

HAAS 1

Memo

0.00

HAAS CNC vertical machine #1

Machine as per Folio FA and Dwg D2873 Identify as D2873-5  
Dwg Rev *A* F1819Folio Rev *AA*

*SL 11/01/19*

*(20)*

120

0.00



QC2- Inspect parts off machine FAI/FAIB

QC

Memo

0.00

Quality Control

*SL 11/01/18*

*20*

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

# Work Order ID 65132

Thursday, January 06, 2011 2:27:13 PM



Page 2

Item ID:	D2873-045	Accept		Setup	Start	
Revision ID:					Stop	
Item Name:	Nut Plate Assembly					
Start Date:	1/6/2011	Start Qty:	20.00		Cust Item ID:	
Required Date:	1/20/2011	Req'd Qty:	20.00		Customer:	
Reference:						

Approvals:	Process Plan:	Date:	Tooling:	Date:	Run	Start	
	QC:	Date:	SPC (Y/N):	Date:		Stop	

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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130	QC8- Inspect parts - second check	0.00							
QC	Memo	0.00	BVA	11/01/19		20	0		
Quality Control									

140	Small Fab	0.00							
Small Fab	Memo	0.00							
Small Fab	1-Deburr □2- C'sink as per Dwg D2873								

*Handwritten signature and date 11/01/19 with circled 20*

150	QC5- Inspect part completeness to step on W/O	0.00							
QC	Memo	0.00	Subs						
Quality Control									

*Handwritten circled 20 with 'count' written above it*

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

**Work Order ID 65132**

Thursday, January 06, 2011 2:27:13 PM



Page 3

Item ID: D2873-045

Accept



Setup Start



Revision ID:

Stop



Item Name: Nut Plate Assembly

Start Date: 1/6/2011 Start Qty: 20.00



Cust Item ID:

Required Date: 1/20/2011 Req'd Qty: 20.00



Customer:

Reference:

Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_

Run Start



QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Stop



Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
160  HandFinish Hand Finishing	Chemical Conversion Coat per QSI005 4.1  Memo	0.00  0.00				20	BR	11-01-20.	
170  QC Quality Control	QC3- Inspect Part Finish  Memo	0.00  0.00	ML	11/01/20		20	φ		
180  Small Fab Small Fab	Small Fab  Memo 1-Assemble as per Dwg D2873 <input type="checkbox"/> 2-Identify as D2873-045	0.00  0.00							EP 11/01/31 (20)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

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Thursday, January 06, 2011 2:27:13 PM

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\_\_\_\_\_

Date: \_\_\_\_\_

**Insp.  
Stamp**

8112131



0.00

center  
 $x=20$

0.00

[illegible]

### Packaging

## Packaging

## Memo

0.00

X-tubes  
Ass'y

11 02 01 26

0.00


\_\_\_\_\_

QC

## Quality Control

## Memo

0.00

11/02/02 

PL 11-02-1  
(20)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries



# Picklist Print

Thursday, January 06, 2011 2:27:17 PM

Page 1

Work Order ID: 65132

Parent Item: D2873-045

Parent Item Name: Nut Plate Assembly




Start Date: 1/6/2011

Required Date: 1/20/2011

Start Qty: 20.00

Required Qty: 20.00

Comments: IPP A 05.09.13 New issue KJ/JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
MS21075L5  Nut Plate		Purchased	No			100	Each	36.0000	2	40			
				<u>Location</u>				<u>Loc Qty</u>		<u>Loc Code</u>			
				ST303				36					
					116082			36					
M6061T6B0.375X01.00 0  6061T6 BAR .375 x 1.00		Purchased	No			180	f	16.4677	0.225	4.736842			
				<u>Location</u>				<u>Loc Qty</u>		<u>Loc Code</u>			
				MAT01				0.45					
					113325			0.45					
				MAT04				16.0177					
					114352			16.0177					
MS20426AD4-6  Rivet		Purchased	No			180	Each	2,061.000	4	80			
				<u>Location</u>				<u>Loc Qty</u>		<u>Loc Code</u>			
				ST317				2061					
					110139			2061					

EP 5/11/01/31  
M116741 (4X)

40 36

22 11/01/18

4.74

EP 5/11/01/31

80

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

<b>DART AEROSPACE LTD</b>		<b>Work Order:</b>	
<b>Description:</b> Radius Block		<b>Part Number:</b>	D2873-5
<b>Inspection Dwg:</b> D2873 <b>Rev:</b> A		<b>Page 1 of 1</b>	

### FIRST ARTICLE INSPECTION CHECKLIST

☒ First Article      ☐ Prototype

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
2.50	+/-0.030	2.505	✓		vern 2-3	
1.000	+/-0.010	1.000	✓			
0.750	+/-0.010	.751	✓			
0.250	+/-0.010	.251	✓			
1.000	+/-0.010	1.000	✓			
2.000	+/-0.010	2.000	✓			
Ø0.128	+0.005/-0.001	.129	✓			
0.359	+/-0.010	.359	✓			
Ø0.316	+0.006/-0.001	.318	✓			
1.000	+/-0.010	1.000	✓			
0.250	+/-0.010	.247	✓			
0.061	+/-0.010	.060	✓			
Ø0.230 x 0.125	+0.005/-0.001 x 0.010	.229 x .127	✓			

<b>Measured by:</b>	<i>SL</i>	<b>Audited by:</b>	<i>B.A</i>	<b>Prototype Approval:</b>	N/A
<b>Date:</b>	11/01/18	<b>Date:</b>	11/01/19	<b>Date:</b>	N/A

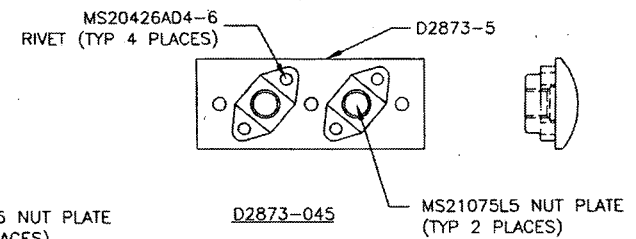
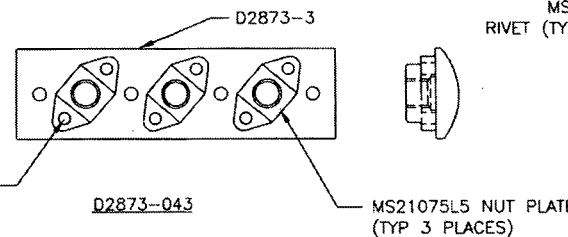
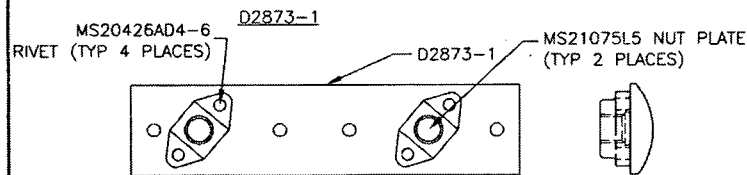
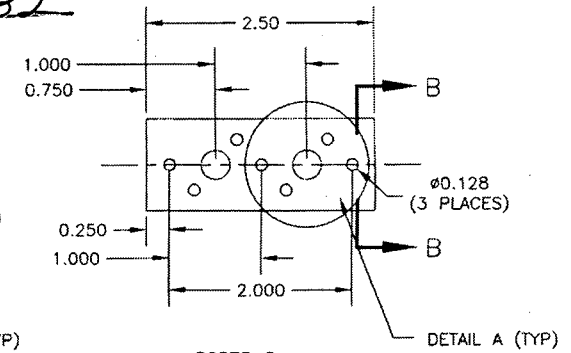
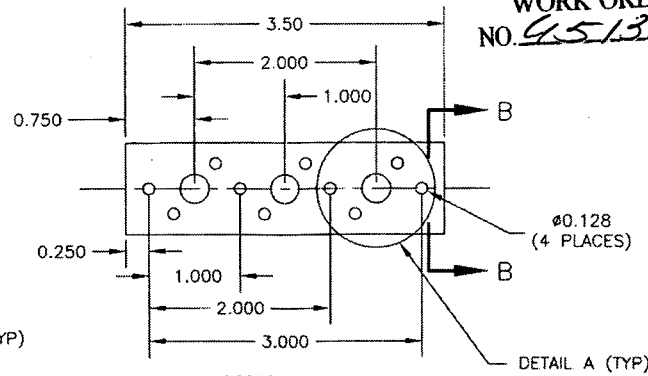
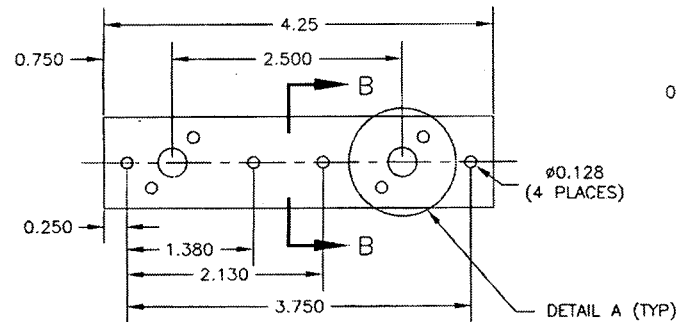
Rev	Date	Change	Revised by	Approved
A	06.08.30	New Issue      P/O D2873-045	KJ/JLM <i>AK</i>	<i>SL</i>

SHOP COPY  
RETURN TO  
ENGINEERING  
UNCONTROLLED COPY  
SUBJECT TO AMENDMENT  
WITHOUT NOTICE

WORK ORDER  
NO. 45132

11-01-6

159  
065



D2873-041

MS20426AD4-6  
RIVET (TYP 6 PLACES)

D2873-043

MS21075L5 NUT PLATE  
(TYP 3 PLACES)

D2873-045

MS21075L5 NUT PLATE  
(TYP 2 PLACES)

#### D2873-1/-3/-5 RADIUS BLOCK

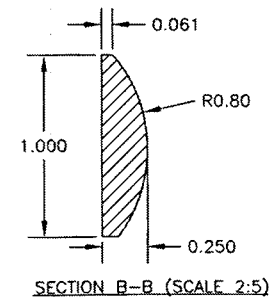
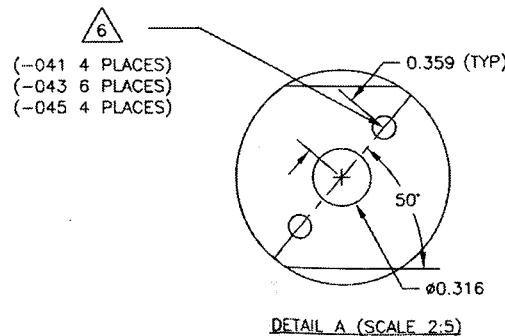
- 1) MATERIAL: 5052-H32/H34 BAR (QQ-A-225/7) (REF. DART SPEC M5052H32B1.000X00.250) OR 6061-T6 BAR (QQ-A-225/8 OR QQ-A-200/8) (REF. DART SPEC M6061T6B1.000X00.250)
- 2) FINISH: ACID ETCH AND ALODINE PER DART QSI 005 4.1
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE INCHES
- 5) BREAK ALL SHARP EDGES 0.010 TO 0.020
- 6)  $\phi 0.128$  PILOT + C'BORE CURVED SIDE  $\phi 0.230 \times 0.125$  DEEP + C'SINK CURVED SIDE  $\phi 0.225 \times 100'$

#### D2873-041/-043/-045 NUT PLATE ASSEMBLY

- 1) INSTALL MS21075L5 NUT PLATE IN ORIENTATION SHOWN USING MS20426AD4-6 RIVETS

#### D2873-041/-043/-045 NUT PLATE ASSEMBLY PARTS LIST

-041	-043	-045	PART NUMBER	DESCRIPTION
X			D2873-041	NUT PLATE ASSEMBLY
	X		D2873-043	NUT PLATE ASSEMBLY
		X	D2873-045	NUT PLATE ASSEMBLY
1			D2873-1	RADIUS BLOCK
	1		D2873-3	RADIUS BLOCK
		1	D2873-5	RADIUS BLOCK
4	6	4	MS20426AD4-6	RIVET
2	3	2	MS21075L5	NUT PLATE



RELEASED  
05-07-26

A	05.07.26	NEW ISSUE
DESIGN	PH	DRAWN BY PH
CHECKED	DS	APPROVED DS
DATE	05.07.26	TITLE
		RADIUS BLOCK
		SCALE
		4:5

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries